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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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*Rosalie Ann Centeno*  
Rosalie Ann Centeno, Secretary  
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DEC 13 2001  
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In the application of: Peter Birke, et al

Serial Number: 09/830,131

Filing Date: October 15, 1999

For: PASTE-LIKE MASS WITH INORGANIC LIQUID CONDUCTORS AND  
LAYERS AND ELECTROCHEMICAL ELEMENTS PRODUCED  
THEREFROM.

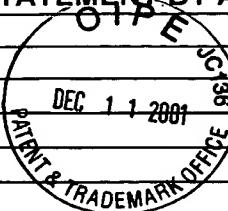
Assistant Commissioner for Patents

Washington, DC 20231

INFORMATION DISCLOSURE STATEMENT

In accordance with 37 CFR § 1.56, Applicant wishes to call the attention of the Examiner to the following references:

- 1) US 5,707,759
- 2) JP Derwent-Abstract 1994: 212521/26 of JP 061 50973
- 3) JP CAPLUS Abstract 1998: 656002 of JP 10270023
- 4) WO 98/26468
- 5) WO 95/16285
- 6) WO 96/38868 A1
- 7) EP 379 372 A1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Complete if Known				
			Application Number	09/830,131			
			Filing Date	October 15, 1999			
			First Named Inventor	Peter Birke et al			
			Group Art Unit				
			Examiner Name				
			Attorney Docket No.	10535US			
U. S. PATENT DOCUMENTS							
Examiner Initials	Cite No.	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date
	1	5,707,759	01/13/1998	Simon et al			9/6/1995
	8	5,546,000	08/13/1996	Maas, et al			3/24/1995
	10	5,009,970	04/23/1991	Kronfli et al			07/25/1988
	11	5,338,625	08/16/1994	Bates et al			07/29/1992
	13	5,296,318	03/22/1994	Gozdz et al			03/05/1993
	14	5,418,091	05/23/1995	Gozdz et al			08/23/1993
	15	5,429,891	07/04/1995	Gozdz et al			05/13/1994
	16	5,456,000	10/10/1995	Gozdz et al			01/05/1995
	17	5,460,904	10/24/1995	Gozdz et al			11/30/1993
	18	5,470,357	11/28/1995	Schmutz et al			04/26/1995
	19	5,478,668	12/26/1995	Gozdz et al			12/26/1995
	20	5,540,741	07/30/1996	Gozdz et al			01/17/1995
	21	5,571,634	11/05/1996	Gozdz et al			08/03/1995
	22	5,587,253	12/24/1996	Gozdz et al			12/24/1996
	23	5,607,485	03/04/1997	Gozdz et al			05/19/1995
	24	5,041,346	08/20/1991	Giles			07/14/1988
	31	5,648,011	07/15/1997	Blonsky			03/15/1995
	33	6,001,509	12/14/1999	Kim et al			11/18/1997
FOREIGN PATENT DOCUMENTS							
Examiner Initials	Cite No.	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation
							No
	4	WO 98/26468	18 Jun 98	WIPO			X
	5	WO 95/16285	15 Jun 95	WIPO			X
	6	WO 96/38868	05 Dec 96	WIPO			X
	7	EP 379 372 A1	25 Jul 90	Europe			X
	9	EP 557 250 A1	25 Aug 93	Europe			X
	12	WO 97/06573	20 Feb 97	WIPO			X
	25	EP 762 525 A1	02 Sep 96	Europe			X
	27	EP 528 557 B1	29 Jul 92	Europe			X
	28	DE3929316A1	07 Mar 91	Germany			X
	29	WO 98/18173	30 Apr 98	WIPO			X
	30	WO 97/49106	24 Dec 97	WIPO			X
	32	WO 99/44245	02 Sep 99	WIPO			X
OTHER PRIOR ART & NON PATENT LITERATURE DOCUMENTS							
Examiner Initials	Cite No.	Citation					
	2	JP Derwent-Abstract 1994: 212521/26 of JP 061 50973					
	3	JP Caplus Abstract 1998: 656002 of JP 10270023					
	26	G. Feuillate et al, Journal of Applied Electrochemistry 5 (1975) 63-69					
	34	Patent Abstract of Japan 299/05, JP 11 031 414 A					

Examiner		Date	
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- 8) US 5,546,000
- 9) EP 557 250 A1
- 10) US 5,009,970
- 11) US 5,338,625
- 12) WO 97/06573
- 13) US 5,296,318
- 14) US 5,418,091
- 15) US 5,429,891
- 16) US 5,456,000
- 17) US 5,460,904
- 18) US 5,470,357
- 19) US 5,478,668
- 20) US 5,540,741
- 21) US 5,571,634
- 22) US 5,587,253
- 23) US 5,607,485
- 24) US 5,041,346
- 25) EP 762 525A1
- 26) G. Feuillade et al, Journal of Applied  
Electrochemistry 5 (1975) 63-69
- 27) EP 528 557 B1
- 28) DE 39 29 316 A1
- 29) WO 98/18173
- 30) WO 97/49106
- 31) US 5,648,011
- 32) WO 99/44245
- 33) US 6,001,509
- 34) Patent Abstract of Japan 1999/05, JP 11 031

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References 1 - 24, and 26 - 27 are in the English language and need no further discussion as to their relevance.

Reference 25, EP 762 525 A1, discloses that the invention concerns an anode for a rechargeable lithium cell comprising a conductive support and a paste containing an electrochemically active material into which lithium can be inserted and a polymer binder. The anode comprises a conductive support and a paste containing an electrochemically active material into which lithium can be inserted and a polymer binder, the anode being characterized in that said binder is a vinyl polymer selected from polyvinyl alcohol (PVA) with the formula  $(-\text{CH}_2-\text{CHOH}-)_n$ , polyvinyl butyral (PVB) and copolymers and mixtures thereof.

Reference 28, DE 39 29 316 A1 discloses that an ion conductor/electrolyte especially suitable for lithium batteries is comprised of a chemically inert, electronically nonconducting solid powder and an electrolyte salt solution with an aprotic solvent. The ion conductor has a solid to pasty consistency depending upon the ratio of the mixture's components and has a specific conductivity (K) of a magnitude  $>10^{-3}$  S/cm at room temperature. Using this ion conductor, solid batteries can be developed with output capacities similar to those previously available only in connection with liquid organic electrolyte systems. Among others,  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$  and  $\text{TiO}_2$  are favorable solids as carriers, especially with extensive surface areas. The liquid phase, which is immobilized by adsorption on these carriers, is formed of a solution of lithium or sodium salts in propylene carbonate, acetonitrile, gamma-butyrolactone, nitromethane, tetrahydrofuran and dimethoxyethane, or similar solvents.

References 29 - 34 have been cited in the International Search Report and are submitted to provide the Examiner easy access to said references.

Copies of the listed documents are submitted herewith along with the form PTO-1449.

Consideration of the foregoing in relation to this application is respectfully requested.

Respectfully submitted,

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Enclosures